

ABSTRACT OF THE DISCLOSURE

A carrier which permits preparation of a catalyst possessed of excellent catalytic performance and used for the production of ethylene oxide, a catalyst obtained by using this carrier, endowed with excellent catalytic performance, and used for the production of ethylene oxide, and a method for the production of ethylene oxide by the use of the catalyst are provided. The carrier is obtained by mixing α -alumina having an alkali metal content in the range of 1 - 70 m.mols/kg (α -alumina) with an aluminum compound, a silicon compound, and an alkali metal compound and calcining the produced mixture. The carrier which has an aluminum content as reduced to Al in the range of 0 - 3 mols/kg of carrier, a silicon compound content as reduced to Si in the range of 0.01 - 2 mols/kg of carrier, and an alkali metal content as reduced to alkali metal in the range of 0.01 - 2 mols/kg of carrier is used for the deposition of a catalyst for use in the production of ethylene oxide.